

### ABSTRACT OF THE DISCLOSURE

A method of manufacturing a split probe tip on a cantilever comprises providing a cantilever having a surface on which is formed a probe that projects outwardly from the surface at one end of the cantilever, irradiating and scanning a tip of the probe with a focused particle beam directed in a direction that is inclined relative to the surface of the cantilever to obtain an image of the probe tip, and determining the center of the probe tip from the image of the probe tip. Then a first channel is formed in the probe tip at the center thereof by irradiating and scanning the center of the probe tip with a focused particle beam to form a split probe tip having two spaced-apart probe tip parts. The forming step comprises using the focused particle beam to form a first channel section that extends radially inwardly from a periphery of the probe tip, and then using the focused particle beam to form a second channel section that extends radially inwardly from the periphery of the probe tip at a location opposite the first channel section and that connects to the first channel section to define therewith the first channel.